

S/169/61/000/011/052/065
D228/D304

AUTHOR: Dolgin, I.M.

TITLE: Aeroclimatic research in the Arctic

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 11, 1961, 46-47
abstract 11B319 (V sb. Probl. Arktiki i Antarktiki,
no. 4, L., Morsk. transport, 1960, 64 - 75)

TEXT: Aeroclimatic research in Soviet Arctica has been developed widely from the time of the 2nd International Polar Year. The organization of systematic observations from drifting ice has contributed greatly to the investigations of the free atmosphere in the Arctic. The obtained data enable conclusions to be drawn about the structure of the Arctic atmosphere, its thermal system, heat transformation, the character and height of the tropopause, and its dependence on the geographic and circulation conditions. Data are given about the variations in the height of the upper and lower boundary of clouds in the Arctic, their vertical and horizontal extent, the microstructure of clouds, and the probability of icing in dif-

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Aeroclimatic research in the Arctic

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ferent cloud forms. 23 references. [Abstractor's note: Complete translation].

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DOLGIN, I.M., kand.geograf.nauk, red.; DOLGANOV, L.V., kand.geograf.nauk, red.; BIKULOVA, R.I., red.; KHRUSTALEVA, N.K., red.; DROZHZHINA, L.P., tekhn.red.

[Materials of the Soviet Antarctic Expedition, 1957-1958] Materialy Sovetskoy antarkticheskoy ekspeditsii, 1957-58. Leningrad, Izd-vo "Morskoi transport." Vol.14. [Second Continental Expedition, 1957-1958; observational data] Vtoraia kontinental'naia ekspeditsia, 1957-1958 gg.; materialy nabliudenii. Pod red. I.M.Dolgina. Book 1. 1960. 721 p. Book 2. 1960. 688 p. Vol.15. [Second Maritime Expedition, 1956-1957; observational data] Vtoraia morskaia ekspeditsiia, 1956-1957 gg.; materialy nabliudenii. Pod red. L.V.Dolganova. 1961. 331 p. (MIRA 14:6)

1. Sovetskaya antarkticheskaya ekspeditsiya, 1957-1958.
(Antarctic regions—Meteorology—Observations)

DRIATSKIY, V.M., kand. geogr. nauk, red.; DOLGIN, I.M., red.; DROZHZHIN, L.P., tekhn. red.

[Materials on observations completed by the research drift stations "North Pole 6" and "North Pole 7" in 1957-58] Mataly nabliudeni nauchno-issledovatel'skih dreyfuiushchikh stantsii "Severnyi polius-6" "Severnyi polius-7" 1957/58 goda. Pod red. V.M.Driatskogo. Leningrad, Izd-vo "Morskoi transport." Vol.2. 1961. 653 p. (MIRA 15:1)

1. Leningrad. Arkhicheskiy i antarkticheskiy nauchno-issledovatel'skiy institut. 2. Nachal'nik dreyfuvushchey stantsii "Severnnyy polius-6" (for Driatskiy).
(Arctic regions--Meteorology--Observations)

DOLGIN, I.M., kand.geograf.nauk; NIKOLAYEVA, T.V., mladshiy nauchnyy sotrudnik; BASOVA, L.G., mladshiy nauchnyy sotrudnik; VORONTSOVA, L.I., mladshiy nauchnyy sotrudnik; DANILOVA, V.N., mladshiy nauchnyy sotrudnik; KOVROVA, A.M., mladshiy nauchnyy sotrudnik; SERGEIEVA, G.G., mladshiy nauchnyy sotrudnik; SMIRNOVA, V.N., mladshiy nauchnyy sotrudnik; KHARITONOVА, L.I., mladshiy nauchnyy sotrudnik; ALEKSANDROV, V.F., aerolog; KUZNETSOV, O.M., aerolog; MAYOPOVA, L.A., aerolog; POSTNIKOVA, D.G., aerolog; SMIRNOVA, I.P., aerolog; VASIL'YEVA, R.P., tekhnik; MEDNIS, L.V., tekhnik; KHARITONOVА, V.A., tekhnik; KHRUSTALEVA, N.K., red.; DROZHZHINA, L.P., tekhn.red

[Aerological observations of Arctic stations during the period from June 30 through December 31, 1957] Aerologicheskie nabliudeniia poliarneykh stantsii s 30 iunia po 31 dekabria 1957 g. Leningrad, Izd-vo "Morskoi transport," 1961. 994 p. (Arkticheskii i antarkticheskii nauchno-issledovatel'skii institut Trudy, vol.243)
(MIRA 14:11)

(Arctic regions--Meteorology--Observations)

DOLGIN, I., kand.geograf.nauk; SOKOLOV, S., mladshiy rauchnyy sotrudnik

Aerology in the Arctic. Mor. flat 21 no.12:38-40 D '61.

(MIRA 14:12)

1. Rukovoditel' otdela Arkhicheskogo i Antarkticheskogo nauchno-
issledovatel'skogo instituta. (for Dolgin).
(Arctic regions--Meteorology)

DOLGIN, I.M., kand. geogr. nauk, red.; NOVIKOVA, G.M., red.;
DRUZHZHEINA, L.P., tekhn. red.

[Transactions of the Soviet Antarctic Expedition, 1955-]
Trudy Sovetskoi antarkticheskoi ekspeditsii, 1955. Leningrad,
izd-vo "Morskoi transport." Vol. 25 [Third Continental Expedition,
1958-1959; observation data] Tret'ia kontinental'naya ekspedi-
tsiya, 1958-1959 gg.; materialy nablyudenii. Book 2, Pod red.
I.M.Dolgina. 1962. 476 p. (MIRA 15:7)

1. Sovetskaya antarkticheskaya ekspeditsiya, 1955-.
(Antarctic regions--Temperature)
(Antarctic regions--Winds)

DOLGIN, I.M., red.; BIKULOVA, R.I., red.; STUL'CHIKOVA, N.P., tekhn.red.

[Tables of observations performed on the drifting research stations "North Pole-6" and "North Pole-7" in 1958 and 1959] Materialy nabliudeniia nauchno-issledovatel'skikh dreifuiushchikh stantsii "Severnyi polius-6" i "Severnyi polius-7" 1958-1959 god. Leningrad, Izd-vo "Morskoi transport," 1962. 627 p. (Leningrad. Arkticheskii i antarkticheskii nauchno-issledovatel'skii institut. Trudy, no.249). (MIRA 16:4)
(Arctic regions—Meteorology—Observations) X

S/1.69/63/000/003/003/042
D263/D507

AUTHORS: Dolgin, I.M., Laykhtman, D.I., Rusin, N.P. and Treshnikov, A.F.

TITLE: Results of meteorological observations in the Arctic and in Antarctica

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 5, 1963, 5, abstract 5A10 (Tr. Vses. nauchn. meteорол. soveshchaniya. T.1. L., Gidrometeoizdat, 1962, 58-71)

TEXT: Apart from a short history of the development of meteorological observations in the Arctic and later in the Antarctic, the author compares regularities in meteorological phenomena in the 2 polar regions. In the coldest parts of the Arctic and the Antarctic the mean annual temperatures are respectively -20 and -55°C, and the absolute minimum temperatures are -50 and -90°C. Temperature of the coastal areas of Antarctica are close to the temperatures of the central Arctic. In central Antarctica the air temperature is 30-40°C lower than in the Arctic, both in the summer and in winter. The mean annual temperature of the free atmosphere up to 16 km is

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Results of meteorological ...

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however only ~ 5-10°C lower over the Antarctic. Stratospheric temperature of both regions compared is almost the same in the summer, and in winter the Arctic stratosphere is 5-15°C warmer. To characterize the effects of advection it is necessary to note that the annual variation of the troposphere over the Arctic is considerably greater than over the Antarctic. The reverse is true of the stratosphere. Wind directions in both regions are illustrated by mean annual graphs of wind directions. In the Antarctic, owing to the peculiarities of the relief of the continent, wind direction is highly constant. Western directions predominate in the Arctic, and eastern in the Antarctic. Mean annual wind velocities are 10-20 m/sec in the Antarctic, and 5-5 m/sec in the Arctic. Maximum wind velocities reach 90 in the Antarctic and 40 m/sec in the Arctic, and near the tropopause in both polar regions the velocity maximum is clearly expressed as 15-20 m/sec. The Arctic may be schematically considered as an ocean surrounded by land, and the Antarctic as a continent by an ocean. According to considerations adduced in the paper, this may explain the peculiarities of the meteorological conditions in the two regions, both in summer and in the winter.

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On the basis of considerations of the radiation regimes, turbulent thermal currents, heat losses due to evaporation, and heat exchange of the active surface with lower layers, the authors show that, in contrast to atmospheres over middle and southern latitudes, polar atmospheres lose heat to the rest of the globe. Polar atmosphere is therefore a cold reservoir for the overall atmosphere. A sufficiently large amount of experimental data has already been collected regarding the problem of the 'iciness of the Arctic basin'; these data are of particular interest for the USSR. The following may specially be mentioned: (1) About 90% of the area of the Arctic basin is covered by ice, and in the summer ice covers 18-36% of the surface of the seas surrounding the Arctic. (2) It may be proposed that there is a certain critical thickness of ice, which decreases from N to S, for which thawing and freezing is balanced over the year. According to arguments put forward by the authors: (1) Results of meteorological observatories in polar regions helped in the solutions of such important national economy problems as ensuring of travel by sea or air, and growth of economical development of the extreme northern territories. (2) Daily variations of meteorological

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Results of meteorological ...

elements are practically nonexistent in polar regions, so that the latter may be regarded as vast natural laboratories for the study of atmospheric processes under most favorable conditions. (5) To solve the current problems of polar meteorology it is necessary to increase the complex of meteorological observations by a considerable amount, increase their true accuracy, and to develop in every way the theoretical foundations of polar studies. Numerical methods of weather forecasting in particular may apparently be used in these regions with greatest success.

[Abstracter's note: Complete translation]

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DOLGIN, I.M., nauchnyy sotrudnik

Obtaining hydrogen for aerological purposes in the Arctic
and Antarctic. Biul. tekhn.-ekon. inform. Tekh. upr. Min. mor.
flota 7 no. 4:128-133 '62. (MIRA 16:4)

1. Arkticheskiy i Antarkticheskiy nauchno-issledovatel'skiy
institut.

(Arctic regions—Meteorology)
(Antarctic regions—Meteorology)

DOLGIN, I.N.

Some results of studying the atmosphere above the Arctic Ocean.
Probl. Arkt. i. Antarkt. no. 11:31-36 '62. (MIRA 16:2)
(Arctic Ocean—Atmosphere)

DOLGIN, I.M.; SOKOLOV, S.I.

"Aerology" by A.B. Kalinovskii and N.Z. Pinus. Part 1: Methods employed in aerological measurements. Reviewed by I.M. Dolgin, S.I. Sokolov. Meteor. i gidrol. no.11:60-62 N '62.

(MIRA 15:12)

(Meteorology)
(Kalinovskii, A.B.) (Pinus, N.Z.)

DOLGIN, I.M.

Studies of clouds in the Arctic. Trudy AANII 230:5-10 '62.
(MIRA 16:8)
(Arctic regions--Clouds)

L 8760-65 EST(1)/FCC ESD 11/AFETR GW
ACCESSION NR: A74M6481

S/8116/63/253/000/C152/0160

AUTHOR: Dolgin, I.I., Dulgakov, L.V.

TITLE: Some results of work in the Arctic and Antarctic in the field of meteorology
during the International Geophysical Year

SOURCE: Leningrad. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.
Trudy, v. 253, 1963. Sbornik statyy, posvyashchenyy pamyati V. V. Frolova;
voprosy gidrometeorologii polarnykh oblastey (Collection of articles in memory of
V. V. Frolov; problems in the hydrometeorology of the polar regions), 152-160

TOPIC TAGS: meteorology, Arctic, Antarctic, atmospheric temperature, air mass,
wind, katabatic wind, atmospheric absolute humidity, temperature inversion

ABSTRACT: This article presents some of the highlights of meteorological work in
the Arctic and Antarctic during the International Geophysical Year, and is not a
systematic presentation of any particular subject. During the IGY-IGC period there
were 14 meteorological and 22 seismological stations in the Arctic. Actinometric measure-
ments were made at 11 stations. Meteorological, actinometric and aerological measure-
ments also were made on the drifting stations SP-6 and SP-7. In the course of 30 months

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L 8760-65
ACCESSION NR: A14046188

more than 117, 000 meteorological observations and 133, 000 actinometric observations were made and about 40, 000 radiosondes were launched. The importance of Arctic observations is briefly discussed, but most of the text is about the SP-7 and SP-6 observations, especially the character of Arctic inversions. The frequency of inversions near the SP-6 during the IGY was 100%; in the area of the SP-7 it was 100% during the cold season and 96-98% in the warm season. The mean thickness of inversions in winter over the SP-8 sometimes exceeded 1.6 km and over the SP-7 1.5 km. Beginning at ground level the intensity of the inversions sometimes attains 14°C and is known even to reach 20°C. Other brief drifting stations data are given concerning the annual variation of temperature in the free atmosphere, annual temperature amplitude at ground level, intrusion of warm air masses and the absolute mean monthly variability of day-to-day temperature. With respectability to the Antarctic, they begin by meteorological observations at Mirny'y, Oazis, Pionerskaya, Vostok, i.e., the main scientific stations. Following the table of relative inaccessibility are given some characteristic results of observations aboard the "Vityaz", "Mir", and "Ost". The principal subjects treated at any length are the katabatic wind and absolute humidity in Antarctica.

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L 8750-65
ACCESSION NR: AT4016488

Orig. art. has: 11 figures and 3 tables.

ASSOCIATION: Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut,
Leningrad (Arctic and Antarctic Scientific Research Institute)

SUBMITTED: 00 INCL: 00 SUB CODE: ES

NO REF Sov: 006 OTHER: 000

Card 3/3

DOLGIN, I.M., red.; KOTLYAKOVA, O.I., tekhn. red.

[Aero logic observations made by polar stations from January 1 to June 30, 1958.] Book 2. Aero logicheskie nablyudenija polarnykh stantsii s 1 ianvaria po 30 iunija 1958 g. Leningrad, Izd-vo "Morskoi transport." Kniga 2. 1963. 1242p. (Leningrad. Arkticheskij i antarkticheskij nauchno-issledovatel'skij institut. Trudy vol. 258). (MIRA 16:12)

DOLGIN, I.M.

Meteorological research in the Arctic during the International Geophysical Year and the year of the International Geophysical Cooperation. Trudy AANII 266:7-10 '64 (MIRA. 18:1)

Winters with evenly distributed temperature ("corelesu") in the Arctic. Ibid. 895-103

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000410810010-6

DOLGIN, I.M.; SOKOLOV, S.I.

Review of Inform. biul. Sov. antark. eksp. no. 52:78-80 '65.

(MIRA 18:10)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000410810010-6"

L 62766-68 IWT(1)/SOC GM
ACCESSION NR. AT5017503

UR/3116/68/873/000/0093/0099

14
12

AUTHOR: Dolgin, I. M.

TITLE: Characteristics of specific and relative humidity in the western sector of the Soviet Arctic

SOURCE: Leningrad, Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut. Trudy, v. 273, 1965. Klimatologiya i radiatsionnyy rezhim Arktiki; sbornik statey (Climatology and radiation conditions of the Arctic), 93-99

TOPIC TAGS: Arctic meteorology, specific humidity, relative humidity, humidity

ABSTRACT: This article gives data on specific and relative humidity in the western sector of the Soviet Arctic. Only observations made simultaneously at all levels are used. It was found that in this area there is a clearly expressed annual variation of specific humidity with a maximum in summer and a minimum in winter. Due to the presence of temperature inversions (a large part of the year) the monotonic decrease of the moisture content with height is disrupted. Since most inversions absent and isothermal conditions are found in the first kilometer layer, the specific humidity is either constant or increases with height. The character of the distribution of relative humidity with height is identical for all stations in this region. In winter the relative humidity in the lower kilometer layer changes little.

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L 63766-45

ACCESSION NR: AT5017503

with height; a more intense decrease of humidity begins above this layer. In summer the relative humidity decreases with height, beginning from the evaporation surface. Some of these conclusions are illustrated by the diagram of the annual variation of relative humidity aloft at Tikhaya Bay shown in Fig. 1 of the Enclosure. Orig. art. has: 3 figures and 3 tables.

ASSOCIATION: Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut, Leninstroyad (Arctic and Antarctic Scientific Research Institute)

55

SUBMITTED: 00

ENCL: 01

SUB CODE: ES

NO REF Sov: 003

OTHER: 00

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L 63766-45

ACCESSION NR: AT5017503

ENCLOSURE: 01

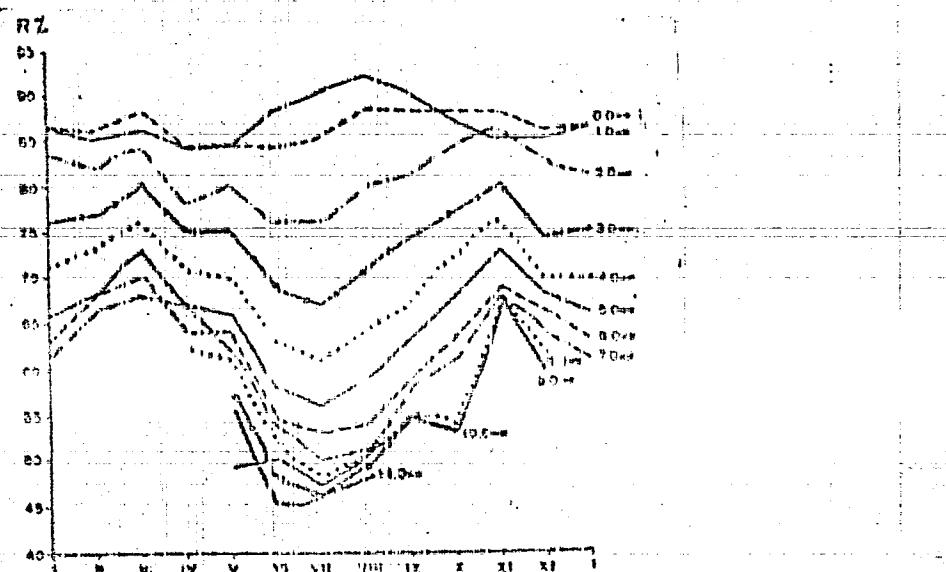


Figure 1. Monthly variation of relative humidity at different heights at Tildhave Bay.

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L 21769-66 EMT(1)/FCC GW

ACC NR: AT6012641

SOURCE CODE: UR/3174/65/000/053/0015/0017

AUTHOR: Dolgin, I. M. (Doctor of geographical sciences); Karimova, G. U. (Junior scientific worker)

ORG: Arctic and Antarctic Scientific Research Institute (Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut) 26
34

TITLE: Mother of pearl clouds in auroras

SOURCE: Sovetskaya antarkticheskaya ekspeditsiya, 1955- Informatzionnyy byulleten', no. 53, 1965, 15-17

TOPIC TAGS: atmospheric cloud, wind velocity, stratosphere, troposphere

ABSTRACT: In form mother of pearl clouds are similar to lenticular clouds and have a somewhat undulating structure. It is postulated that they are formed in air waves over high mountains. Their study is important for determining the velocity of air movement in the middle stratosphere and the transfer of water vapor from the troposphere into the stratosphere. There is basis for assuming that the appearance of mother of pearl clouds is possible at relatively low temperatures (below -80°). Most observations have been made in the Arctic. Humidities in the Arctic and in Antarctica are approximately identical, but stratospheric air temperature in Antarctica in winter is lower than in the Arctic. It therefore is assumed that in Antarctica mother of pearl clouds should appear more frequently than in the Arctic. The majority of such obser-

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L 21769-66

ACC NR: AT6012641

vations in Antarctica have been made late in winter when stratospheric temperature was lowest. Taking into account the importance of investigation of these clouds and that their appearance is most probable in Antarctica, it is recommended that future expeditions should increase attention to this phenomenon. [JPRS]

SUB CODE: 04 / SUBM DATE: 25Jan65 / ORIG REF: 008 / OTH REF: 002

Card 2/2 UVA

REF ID: A62471 R2(1) DM
ARCTIC AND ANTARCTIC SCIENTIFIC RESEARCH INSTITUTE

SOURCE CODE: UR/3174/65/000/054/0015/6010

AUTHOR: Pol'yanin, I. M. (Doctor of geographical sciences); Sokolov, S. I. (Junior research associate)

ORG: Arctic and Antarctic Scientific Research Institute (Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut)

TITLE: Fluctuations in air temperature over Mirnyy

SOURCE: Sovetskaya antarkticheskaya ekspeditsiya, 1955-. Informatsionnyy byulleten', no. 34, 1958, 15-18

TOPIC INDEX: Arctic climate, air temperature, troposphere, wind measurement

ABSTRACT: The findings of a five-year study (1956-60) of fluctuations in air temperature over Mirnyy are presented. Changes in air temperature are usually due to circulation of air masses. A definite relationship exists between the tropospheric temperatures and the recurrence of the wind direction in the given region. In 1957, the recurrence of the wind direction in the southern quarter of the 500 millibar surface was 15% in excess of the "average". The recurrence of wind direction in the northern quarter of that surface was 49% during the same period. In April 1958, a cold month, the recurrence diminished in the northern quarter to 43% and increased to 28% in the southern. During the warm October of 1957, the wind recurrence rose to 50.4%

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L 09455-67

ACC NR: A16025293

In the northern quarter and to 24.3% in the southern. Presumably, similar fluctuations also occur in the continent's interior. This would account for the appearance of "warm spots" near the stations Vostok and Amundsen-Scott. In 1958, these spots were due to winds blowing from the Indian ocean. Orig. art. has: 1 figure, 1 table.

SUB CODE: 04/ SUBM DATE: 10Apr65

50 1/2

L 38146-66 EWT(1)/FCC GW

ACC NR: AT6012777

(A')

SOURCE CODE: UR/2561/65/000/021/0036/0041

34
B41

AUTHOR: Dolgin, I. M.; Karimova, G. U.

ORG: none

TITLE: Distribution of specific and relative humidity in the central sector of the Arctic ✓

SOURCE: Leningrad. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut. Problemy Arktiki i Antarktiki, no. 21, 1965, 36-41

TOPIC TAGS: atmospheric humidity, radiosonde, troposphere, anticyclone

ABSTRACT: Atmospheric observations made over the Chelyuskin Cape, Tiksi Bay, and Dixon Island were investigated using radiosonde methods. The study shows that the specific humidity increases to some extent in the lower atmospheric layer in thickness and slowly decreases in the higher layers with increase in altitude. In January, the specific humidity at the Chelyuskin Cape is 0.4 g/kg and 0.6 g/kg for low and 3 km altitudes, respectively. In layers at altitudes of 1-5 km, the vertical gradient is approximately -0.12 g/kg/100 m, whereas in the upper troposphere it is -0.03 g/kg/100 m. Near the earth, the relative humidity during the whole year usually exceeds 60%; however, during the strong anticyclones it may be as low as 2-4% in the lower 500m layer. During the warm seasons, the vertical gradients are positive for magnitudes 0.5-1.4%.

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UDC: 551.571.7

L 38146-66

ACC NR: AT6012777

/100m in the lower 5 km layer. The yearly variations in the relative humidities of the Chelyuskin and Tiksi areas are similar to these of the western sector of the Arctic, with daily variations in synoptic conditions up to 60%. Orig. art. has: 4 figures, 1 table.

SUB CODE: 04/ SUBM DATE: 13Apr65/ ORIG REF: 003

Card 2/2, 1/LP

L 36076-66 EWT(1)/FCC GW
ACC NR: AT6012860

(N)

SOURCE CODE: UR/3174/65/000/052/001870080

29

B+1

AUTHOR: Dolgin, I. M.; Sokolov, S. I.

ORG: none

TITLE: Aerological reference book Antarctica¹²

SOURCE: Sovetskaya antarkticheskaya ekspeditsiya, 1955. Informatsionnyy byulleten', no. 52, 1965, 78-80

TOPIC TAGS: Antarctic climate, climatology, wind velocity, isobar, tropopause

ABSTRACT: The authors review the book--Aeroklimaticheskiy spravochnik Antarktiki (Air-Climate Reference Book on Antarctica) which was begun in 1962 and recently completed. The 2806-page book, the product of a joint effort by the Arctic and Antarctic Institute and the Scientific Research Institute of Aeroclimatology (NIAK), lists mean and extremal values of temperature, wind velocity, and humidity and presents data on standard isobaric surfaces. Fluctuations in the tropopause throughout the year are treated in detail. Orig. art. has: 2 figures.¹²

SUB CODE: 04/ SUBM DATE: 29Sep64

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Card 1/1

L 40011-66 EWT(1) GW

ACC NR: AT6016059 (A, N) SOURCE CODE: UR/3174/66/000/057/0043/0059

44
PFI-

AUTHOR: Dolgin, I. M. (Doctor of geographical sciences)

ORG: Arctic and Antarctic Scientific Research Institute (Arkticheskiy i Antarkticheskiy nauchno-issledovatel'skiy institut)

TITLE: Some results of meteorological and aerological investigations in Antarctica in 1956-1966

SOURCE: Sovetskaya antarkticheskaya ekspeditsiya, 1955. Informatsionnyy byulleten', no. 57, 1966, 43-59

TOPIC TAGS: Antarctic climate, Arctic climate, solar radiation scattering, troposphere, wind velocity, anticyclone, heat balance, temperature inversion, stratosphere

ABSTRACT: Heat balance, temperature, temperature inversion, wind velocity and its recurrence in the Arctic atmosphere, are discussed on the basis of observations conducted at the Mirnyy, Vostok, and coastal and central stations. Some of the data are compared with those of the Arctic region. The data show that 1) the yearly surface radiation balance is negative; 2) radiation balance is slightly positive in the central regions of the Antarctic when the solar heights are over 17°; 3) direct radiation is the main radiation balance factor (60-80%); 4) density of direct and scattered radiation changes gradually with altitude; 5) relief and circulation determine temperature cha-

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L 40011-66

ACC NR: AT6016059

Characteristics in Antarctica; 6) strong temperature inversions with altitude are present even during the warm periods; 7) the mean yearly temperatures show deviations of 3-5°C for the troposphere and 10°C for the stratosphere, respectively; 8) tropopause altitude is a function of air temperature in the troposphere and stratosphere; 9) wind velocities and their directions are affected by topography; 10) greater wind velocities in the upper troposphere and the lower stratosphere of the coastal Antarctic region are closely connected with stream-line flows; 11) anticyclones are predominant at the Vostok and Komsomol'skaya stations. Orig. art. has: 7 figures, 2 tables.

SUB CODE: 04,08/ SUBM DATE: 04Oct65/ ORIG REF: 017

me
Card 2/2

DOLGIN, M. Ye.

AUTHORS: Dolgin, M. Ye., Engineer, Davydov, V.D., Nikitin, V.D., Engineer 67-58-2-8/26

TITLE: The Automatic Photo-Electron Indicator DDN -1 for the Determination of the Moisture Content in Gases (Avtomatuskiy fotoelektronnyy indikator vlaghnosti gazov DDN -1)

PERIODICAL: Kislorod, 1958, // Nr 2, pp. 39-43 (USSR)

ABSTRACT: The above moisture indicator is based upon the principle of the condensation method. In the section. Determination and the Main Characteristics of the Apparatus the measuring or control of the moisture content of gases within the temperature range of from +40 to -40° at an atmospheric pressure of 0.01-165 atm excess pressure is given for purposes of determination. In the section. Pneumatic Cooling System this system is described on the basis of a scheme. Furthermore, the description of the cooler for indicator mirrors is given in form of a scheme. In the section: The Photo-Optical Indicator a device is described by means of which signals are transmitted to the amplifier of the apparatus by the condensation on the mirror. The scheme mentioned is described. In the section: Electrical Scheme of the Apparatus the description is based on a

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The Automatic Photo-Electron Indicator DDW -1 for the
Determination of the Moisture Content in Gases

67-58-2-8/26

detailed wiring diagram. In conclusion it is argued that the apparatus described has two separate functions: "control" or "measuring" and is therefore regularly used for control during operation or for the determination of the point of condensation of a gas. The apparatus is already being produced in series by the "Kiyevpribor" works of the Kiev Sovnarkhoz. It can be used for: 1.) Controlling the moisture content of gases under pressure which are used for driving automatic systems with pneumatic connection. 2.) Controlling the moisture content in the production of liquefied gases, ammonia synthesis, etc. 3.) For the control of gaseous oxygen under pressure, such as is used for respiration when flying in great heights, and 4.) In connection with scientific research work carried out in laboratories. There are 6 figures.

AVAILABLE: Library of Congress

1. Gases--Moisture content--Measurement 2. Gases--Temperature
factors 3. Equipment--Characteristics

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DOLGIN, R.A.

The P653 and P653A -type hydraulic presses with 600 ton capacity.
Biul.tekh.-ekon.inform no.2:28-29 '59. (MIRA 12:3)
(Hydraulic presses)

DOLGIN, S.I., inzh.

New route indicators. Avtom., telem.i sviaz' 5 no.7:17-18 JI '61.
(MIRA 14:10)
(Railroads--Signalizing)

DOLGIN, S.I., imzh.

PGU-65 standardized dispatcher control boards for hump yards.
Avtom., telem. i svizn' 9 no.11:13-15 N '65.

(MIRA 18:12)

L 37686-66 EEC(k)-2/EWI(1)/T IJP(c)

ACC NR: AT6021246

SOURCE CODE: UR/3217/65/000/001/0116/0118

AUTHOR: Dolgin, V. P. (Engineer); Novozhenin, N. N. (Engineer); Solodyankin, Yu. I. (Engineer)

ORG: none

TITLE: One type of double diode

B+1

SOURCE: Ukraine. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya. Priborostroyeniye, no. 1, 1965, 116-118

TOPIC TAGS: chemotron, solion

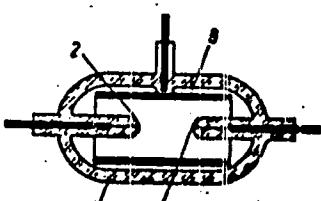
ABSTRACT: The development of a new chemotron double diode (see Fig. 1) is reported.

Fig. 1. New chemotron double diode

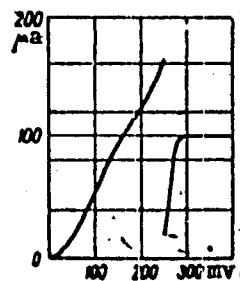


Fig. 2. I-V characteristic

Card 1/2

L 37686-66

ACC NR: AT6021246

Glass envelope 1 houses 0.1-mm Pt-wire anodes 2, 4 and 300-mm² Pt-screen cathode 3. The diode is filled with a 0.001 M Li₂ and 2HCl solution. Its I-V characteristic (see Fig. 2) has a jump at 250 mv with a maximum current of 165 μa; rectification factor, 2222 at ±170 mv. The sustained maximum diffusion current is 100 μa or less; frequency multivibrator. Orig. art. has: 4 figures.

[03]

SUB CODE: 09 / SURM DATE: 09Feb66 / ORIG REF: 003 / ATD PRESS: 5041

me
Card 2/2

DOLGIN, Yul.

Sound film in a lesson. Geog. v shkole 18 no.1:38-42 Ja-J'
'55. (MLRA 8:3)

(Motion pictures in education)(Geography--Study and
teaching)

OLESEVICH, Kirill Vladimirovich; DOLGIN, Yu.I., kand.tekhn.nauk,
retsenzent; ONISHCHEMENKO, N.P., inzh., red.

[Wear of the elements of gas turbines operating on solid fuel]
Iznos elementov gazovykh turbin pri rabote na tverdom toplive.
Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959.
148 p. (MIRA 13:2)
(Gas turbines)

YUDASINA, A.G.; MALINOVSKIY, M.S.; DOLGINA, A.F.; KOKHAN, L.M.

Unsaturated α -oxides. Part 2; Enyne oxides with cyclic radicals.
Ukr. khim. zhur. 31 no.10:1089-1091 '65. (MIFB 19:1)

1. Dnepropetrovskiy gosudarstvennyy universitet. Submitted June 6,
1964.

DOLGINA, A.I.; ALEKSEYEVA, D.D.

Analysis of mixtures of methylamines and ammonia by liquid
partition chromatography. Zav.lab. 29 no.1:22-24 '63.
(MIRI 16:2)

1. Gosudarstvennyy institut prikladnoy khimii.
(Methylamine) (Ammonia) (Chromatographic analysis)

PETROVA, M.P.; DOLGINA, A.I.

Analysis of mixtures of methylamines and ammonia by gas-
liquid partition chromatography. Zhur. anal. khim. 19
no.2:239-242 '64. (MIRA 17:9)

1. Gosudarstvennyy institut prikladnoy khimii, Leningrad.

CA

The properties of difficultly sinterable dolomite of the Abano deposit. G. V. Kulakov and O. Z. Dolgina. Ogranich. 13, 17-21(1948).—The Abano deposit is along the upper reaches of the Lopan'-Takhal river in the Caucasus. The dolomites analysis: SiO₂ 0.26-0.18, Al₂O₃ + TiO₂ 0.36-1.40, Fe₂O₃ 0.04-0.28, CaO 30.45-33.02, MgO 18.79-10.97, MnO up to 0.03, and ignition loss 45.45-46.80%. The dolomite is large-grained and has a porosity of 2.0-10%. Size of crystals varies from 0.08 to 1.75 mm. Lumps of the dolomite, after calcination at 1700°, are very unstable in air; with the exception of two samples which had a finer grain structure and a higher than normal, destruction started after 4-7 days and was complete after 7-16 days. Samples compressed from fine wet ground dolomite showed sufficient stability after calcination at 1800°; destruction started in 34-60 days and, for some, was not complete even after 110-171 days. Samples made

from wet-ground dolomite with admixts. of alumina, sand, or dress and calcined at 1400°, which is 180-300° lower than for samples without admixts., showed, nevertheless, a high resistance to hydration; destruction started after 20-100 days and only 7 of the 20 samples were completely destroyed after 58-79 days. In mastering the production of metallurgical dolomite from this material, it is suggested that initially a charge be used which, taking into account the ash in the fuel, will give a calcined product contg. 30% free CaO, 5% Al₂O₃ + Fe₂O₃, and Al₂O₃/Fe₂O₃ of 0.23. This will correspond to a compn. of 4CaO.Al₂O₃.Fe₂O₃ 4.47, 2CaO.Fe₂O₃ 4.4, 3CaO.SiO₂ 29.15, MgO 31.8, and CaO 30%. After the process has been mastered, the charge should be selected to give a product of 45% free CaO, 5% Al₂O₃ + Fe₂O₃, and Al₂O₃/Fe₂O₃ of 0.33; this will correspond to a mineral compn. of 4CaO.Al₂O₃.Fe₂O₃ 4.46, 2CaO.Fe₂O₃ 4.4, 3CaO.SiO₂ 22.65, MgO 33.99, and CaO 43%. B. I. Kamich

COMPOUND ELEMENTS

COMPOUND POWDERS

A18-11-1 METALLURGICAL LITERATURE CLASSIFICATION

End abr

17 - C-100-100

Wetting of dolomite with calcite induction. G. V. Kukniev
and G. E. Dolgina. (Ogneprery, 1948, 20, 173; Sov. orem. Akad.,
1949, 20(2), 212mp) dolomite containing calcite (MgO , 3.2; Al_2O_3 +
 TiO_2 , 0.55; FeO , 0.42; CuO 0.05, and MgO 19.9%; loss on
ignition 48.9%) was unstable after calcining for 8 hr. at 1400° or
1500° and began to disintegrate after storage in air for 3 days.
When subjected to wet fine-grinding it sintered completely on
calcining at 1500° and no disintegration occurred after storage in
air for 133 days. Dry- and wet-ground samples calcined at 1500°
had the same resistance to hydration. Wet-ground samples with
calcite addition all fired well after calcining at 1500° and had
high resistance to hydration.

R. H. Clarke

DOLGINA, G. Z.

TA 6/49T40

USER/Engineering

Jun 48

Agglutination
Dolomite

"Technology of Processing Lis'yegorsk Dolomites,"
Prof G. V. Kukolev, Dr Tech Sci; G. Z. Dolgina, Jr
Sci Asst, 6 pp

"Ogneupory" Vol XIII, No 6 , p 279-279.

Report of experiments. Tables show chemical composition,
porosity and specific gravity of various dolomites,
their agglutination at various temperatures,
and effect of heating at 1,500° for 2 hours.

6/49T40

Sintering processes and methods of improving metallurgical dolomites. G. V. KERGOUN AND O. Z. DOLGINOV. *Ogneupory, 18* [2] 830-41 (1950). Mixtures of synthetic clinkers were prepared corresponding to compositions of 5, 10, and 20% $4\text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot \text{FeO}_2 + 2\text{CaO} \cdot \text{FeO}_2$ and 15, 30, and 35% free lime. Shapes made from these mixtures were fired in a kryptol furnace at 1450°C for 2 hr, followed by determinations of bulk density and porosity. For a constant value of $\text{CaAF} + \text{CaF}$ and increasing content of free CaO , the bulk density increased and apparent porosity decreased; the same was true when free CaO was constant and $\text{CaAF} + \text{CaF}$ increased, but improvement in sintering was not as pronounced when the $\text{CaAF} + \text{CaF}$ content reached 20%. To attain good sintering, a high content of sesquioxides, especially silica, must be avoided. The resistance of dolomite of different mineralogical composition to open hearth slag of $80\% \text{SiO}_2$, $10\% \text{Al}_2\text{O}_3$, $3\% \text{MnO}$, $10\% \text{FeO}$, $30\% \text{CaO}$, $30\% \text{MgO}$, $3\% \text{P}_2\text{O}_5$, $3\% \text{TiO}_2$, and 1.93% was judged from the refractoriness of dolomite + slag mixtures. It depended upon the content of free CaO (MgO content being normal), $4\text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot \text{FeO}_2$, and $20\text{CaO} \cdot \text{FeO}_2$ (or $3\text{CaO} \cdot \text{Al}_2\text{O}_3$) and, hence, upon the amount of SiO_2 . Dolomites with a large amount of fluxes absorbed only about one-third the amount of slag absorbed by very pure dolomite before the mixture began to flow at 1500°. Above 1500°, the refractoriness of the dolomites was a direct function of $K = \text{free CaO}/(\text{CaAF} + \text{CaF})$. This curve can be utilized to calculate the refractoriness of dolomite if the MgO content is normal or close to normal and $\text{CaO} \cdot \text{MgO}$ does not differ much from the theoretical value of 1.30. The refractoriness, t , can then be calculated from $t =$

U 11

$$\text{at } t = \frac{\pi}{4} \cdot \frac{100}{K^2}, \text{ where } \pi \text{ is a wide confluent and } \omega \text{ is the angle between the curve and the abscissa} (A).$$

The chief method of reducing the sintering temperature of pure dolomites, with or without admixtures, is wet fine grinding. Sintering is accelerated, first of all, by trivalent oxides in following decreasing order: $\text{MnO}_2 > \text{FeO}_2 > \text{Al}_2\text{O}_3 > \text{Cr}_2\text{O}_3$. The extent of sintering for these admixtures is greater in the case of dolomite low in silica. Quartz hinders sintering without admixtures and retards the accelerating effect of admixtures. Salts of alkali metals retard sintering although they increase the amount of liquid phase and lower its viscosity. An unfavorable effect was also exhibited by CaCl_2 , $\text{CaCl}_2 \cdot \text{MnO}_2$, and NaCl . For favorable action, the melt should contain structural groups corresponding to the lattice of the crystallizing and sintering solid phase, in this case CaO and MgO . The introduction of oxides, which change the ratio of the ions $\text{O} : \text{Me}$, should change the oxygen environment of the cations and, hence, the suitability of the structural groups in the melt to build the lattice of the recrystallizing phases (CaO and MgO). Trivalent oxides, which accelerate sintering, give the least deviation of the magnitude of $\text{O} : \text{Me}$, corresponding to CaO and MgO . All oxides which retard sintering give considerable deviation of $\text{O} : \text{Me}$, either way. Poor sintering is not connected with increased viscosity of the melt because admixtures (NaCl , MnO_2), which considerably retard sintering decrease the viscosity of the melt. Complete substitution of FeO_2 by Al_2O_3 resulted in a drop in viscosity. Al_2O_3 has a smaller accelerating effect on sintering than FeO_2 . Sintering of dolomites with admixtures is not determined by the extent of fluidity and wetting capacity of the melt; conversely, admixtures, such as alkali oxides, retard the sintering considerably, lower the viscosity, and improve the wetting capacity.

B.Z.K.

BCS

*Ceramic Products
Refractories*

304. *Stabilizing processes and methods of improving the quality of metallurgical dolomites.* — O. V. Kuznetsov and G. Z. Duganova (Ognyanov), 16, 63, 1931. This paper deals only with the hydration stability of dolomite and its production with an increased content of free lime. Russian dolomites fired even at high as 1,700° C. showed an extremely low resistance to hydration (completely dissolved after 10 days in the air) whereas specimens ground by the wet method and fired at 1,550° C. showed good stability and those with some additions were stable even after being fired at 1,400° C. Curves for the wet-ground dolomites with additions showed a dependence of hydration on the increase of MgO content from 3 to 5% provided $\text{Al}_2\text{O}_3 : \text{Fe}_2\text{O}_3 = 0.23$ and the firing temp. was 1,400° C. Specimens with 5% and 30% free CaO were more resistant to atmospheric hydration with 5% of $\text{Al}_2\text{O}_3 + \text{Fe}_2\text{O}_3$ than with 1%; with 1.5% of free CaO there was no essential difference. If dolomite is prepared by fine wet grinding, fired at the same temp. (up to melting) and has the same chem. comp. of the grain (4-12 and 12-30 mm.), the specimens obtained by grinding of an already fired dolomite have a considerably higher hydration capacity than would specimens that are not ground after firing. This indicates that the outside layer in specimens plays a protective role. Data are given on the consumption of dolomite/ton of steel. It is concluded that it would be rational to change over to a production of dolomites with high contents of free CaO , maintaining the normal MgO content. (1 fig., 9 tables.)

15

High-quality metallurgical dolomite with an increased content of free lime. J. V. Egorov and G. Z. Lopukina. Zhurnal Nauchno-Issledovatel'skogo Instituta po Prochnosti Metallov i Zidut, No. 1 (1955/1956), No. 1 (1956), 218-231. Moscow, May 1956, Abstr. No. 8293. -- To obtain a good sintering, it is not necessary to increase the content of transition oxides in dolomite, but it is necessary to lower SiO₂. The rate of sintering was decreased by fine wet grinding of raw material or by addition of Fe scale. MnO₂, Fe₂O₃, Al₂O₃, and Cr₂O₃ accelerate sintering. Alkalies retard sintering but decrease the amt. of liquid phase and decrease viscosity. The higher the content of free CaO dolomite, the more open-hearth slag it can absorb. To improve the qualities of metallurgical dolomite it is necessary to use pure (especially strong) dolomite, which produces calcined products containing 35-37% of free lime, a limited amt. of impurities, and a minimum of SO₃.

A. I. Prystag

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4E2C
4E11
4E8

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"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000410810010-6

for recovered properties of ~~detainees~~ in training materials G. I. Report

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000410810010-6"

AUTHORS:

Yudin, V. I., Tsvetin, L. A., Belzina, G. Z.

Sov/131-50-8-1/12

TITLE:

COAL BASED REFRACTORY MATERIALS WITH CARBON BINDING
(кароцистические огнеупоры на угольной связке)

PUBLISHER:

Университет, 1958, № 8, pp. 337-344 (USSR)

ABSTRACT:

In analytical conditions and the results obtained by experimental research concerning the production of carbonaceous refractories with carbon binding are discussed. This method takes advantage of the fact that, when heated, coal goes over into a plastic state, and it is based upon pressing in a heated state as has already been proved by the authors (Ref 1). The temperature interval of the plastic state is characterized by the thickness of the plastic layer which is determined by the plastometric method (GOST 1126-48). Figure 1 shows the plastometric diagram for fat coal, which possesses the greatest coking capacity as may be seen from figure 1. The range within fat coal softens as well as the possible temperatures for warm pressing are between 350 and 480 - 490°. Table 1 shows the characteristic of the most important initial materials.

Card 1/3

Synthet. carbon refractory Materials with Carbon Bimbing

NOV/15/1981, 12

bricks used in the experiments. The plastometric diagram as well as the curve of the escape of volatile components of the coal of the pit 4/5 at Nikitevka are shown by figures 1 and 3. The authors employed the method of pressing by heating the mass in the mold by means of a current which they made to pass through it. Laboratory tests were carried out in a hollow cylindrical mold made from fireclay brick for purposes of insulation. The electric current used for heating the pressed part was made to pass through the press ram. The experimental press form and the small testing device were designed by the construction engineers A. P. Drobotov and G. F. Pshemyshskiy. The composition of the most suitable masses and the properties of the samples produced in the laboratory are described by table 2. In the test plant of the VNIIG a quantity of bricks was produced. For this purpose a mold was made, which was mounted on to a hydraulic press with 500 t pressure (Fig 4). Further, the production of a quantity of carbon-containing bricks is described. The total length of time needed for the processes of heating, pressing, and burning can be reduced to 20 - 25 minutes. Table 3 shows the properties of these bricks as well as of the car-

Card 2/3

Carbonaceous Refractory Materials With Carbon Binding

SOV/131-58-8-1/12

bonaceous blocks for the blast furnaces of the Dneprovsk electrode factory. Experiments, which are carried out at a temperature of 1600° during a period of 16 hours showed no traces of a harmful influence exercised by the liquid cast iron upon the carbonaceous refractory materials. An investigation of these test bricks carried out in accordance with OST 8267 proved their high degree of thermal resistivity. For the purpose of further research work to be carried out with this material the establishment of an experimental industrial plant is recommended. There are 4 figures, 3 tables, and 6 references, 6 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut ogneuporov
(All-Union Scientific Research Institute for Refractories)

Card 3/3

DOLGINA, G.Z.

AUTHORS: Ivanov, Ye. V., Gaodu, A. N., Dolgina, G. Z. 131-23-5-8/16
Vit', Ye. F.

TITLE: Testing Magnesite-Chromite and Periclase-Spinellide Bricks
in the Converter With Bottom Blowing (Ispyt-
aniye magnezitokhromitovogo i periklazospinelidnogo kirpi-
cha v konverteire pri donnoy produvke)

PERIODICAL: Ogneupory, 1958, Vol. 23, Nr 5, pp. 224-229 (USSR)

ABSTRACT: The Yenakiyev metallurgic works under participation of the
Ukrainian Metal Institute as well as the Khar'kov Institute
of Refractory Materials carried out experiments with the pro-
duction of steel with low and average carbon content. This was
done by means of blowing through the bottom of Martin cast
iron with a vapor-oxygen mixture in a converter of 2800 mm
diameter and contents of 12 t of cast iron. In the experiments
the converter lining consisted of bricks from the plants im. Pe-
trovskiy and "Magnesit". In both campaigns basic
bottoms were applied. The physico-chemical properties of the
refractory products are mentioned in table 1. The lining sec-
tions next to the bottom showed the highest wear. The operat-
ing characteristics of the converter in the experimental cam-

Card 1/2

Testing Magnesite-Chromite- and Periclase-Spinellide Bricks 131-23-5-8/16
in the Converter With Bottom Blowing

paigns are illustrated in figures 1 and 2. In the investigation of the finished off refractory products also participated P. D. Pyatikop who carried out the petrographic investigations. In table 3 the physico-chemical properties and in table 4 the mineralogical composition of the finished refractory products are quoted. In figure 3 a brick of the converter after termination of the kiln campaign is shown. The refractory products wear as a result of the mechanical flushing away and the pitting of the working surface of the bricks as well as by chemical erosion at high temperatures. In table 5 chemical analyses of the slags are shown which permit to judge on the dynamic of the wear during fusion. Furthermore it is reported in detail on the wear of the lining in different sections. The periclase-spinellide bricks have shown the best results of all tested refractory bricks of the converter lining. There are 3 figures, 5 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut ogneuporov (All-Union Scientific Research Institute for Refractory Materials)
Yenakiyevskiy metallurgicheskiy zavod (Yenakiyev Metallurgical Plant)

- Card 2/2 1. Refractory materials - Production 2. Refractory materials - Test methods 3. Refractory materials - Test results

S/131/60/000/e /c c-6
B015/B011

AUTHOR: Dolgina, G. Z.
TITLE: Dolomite Bricks With Free Lime
PERIODICAL: Ogneupory, 1960, No. 5, pp. 227-232

TEXT: In the present article, the author describes the production of such dolomite bricks and the determination of their main parameters. Pure dolomites from the Styl'skoye and Novo-Tritskoye deposits were used for the investigation; their chemical composition is shown in table 1. Anhydrous binders of the types P and ZIS were used in the preparation of samples from burned clinker. The grain size of the raw materials may be seen from table 2, and a description of the burned samples is given in table 3. The author then examines the possibility of producing high-quality dolomite products from clinker obtained in different ways. Binder P was used for the purpose. Samples burned at 1600° exhibited a porous surface (Fig. 1). After the graining and burning method was changed, it was possible to obtain good samples whose properties are specified in table 4. To check laboratory results,

Card 1/2

Dolomite Bricks With Free LimeS/131/60/C00/05/10/016
B015/B011

sample bricks from dolomite were prepared at the test plant UNIIO, and were burned at 1650°. The respective composition and properties are shown in table 5. On the strength of these results, a pilot plant sample batch of about 2 tons of such bricks was manufactured. After the drying and burning conditions had been determined, perfectly acceptable bricks were obtained, as is shown in Figs. 2 and 3. The author points out in conclusion that a technique has been worked out for producing dolomite bricks with free lime. Pure dolomites with a high content of free calcium oxide and a sufficient content of free magnesium oxide along with a low content of alumina and sesquioxides should be used for the purpose. The anhydrous binder P is suitable for the purpose. Drying and burning conditions are finally given. There are 3 figures, 5 tables, and 8 Soviet references.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut ogneuporev
(Ukrainian Scientific Research Institute of Refractories)

Card 2/2

IVANOV, Ye.V.; RAKHIM, V.P.; DOLINA, G.Z.; BELYAYEVA, Z.M.

Service of refractories in converters with top oxygen flow and improvement of the procedure for the production of converter bricks. Stor.nauch.trud. UNIIO no.5:210-233 '61.

(Converters) (Firebrick)

(MIRA 15:12)

DOLGINA, G.Z.

Testing of prestabilized dolomite firebrick in the lining
of a basic cupola. Ogneupory 28 no.10:460-464 '63.

(MIRA 16:11)
I. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.

DOLGINA, G.Z.; MARKEVICH, Ye.P.

Dolomites from the Kara-Bau deposit. Ogneupory 28 no.11:
498-503 '63. (MIRA 16:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.

DOLGINA, G.Z.; MARKEVICH, Ye.P.

Stabilized magnesite-dolomite bricks in converter linings.
Ogneupory 28 no.12:553-558 '63. (MIRA 16:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.

ANTONOV, G.I.; BOGINA, G.Z.; MINKOVICH, B.D.; PROKUDIN, V.Yu.

Stabilized dolomite brick in the checkerwork of an open hearth
furnace. Ogneupory 30 no.9;21-25 '65. (MIRA 18;9)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.

NEGRASH, I.L., inzh.; DOLGINA, I.S., inzh.

Signaling at the crossings of railroad station areas.
Avtom. telem. i sviaz' 3 no.12:6-10 D '59.

(Railroads--Signaling) (Railroads--Crossings) (MIRA 13:4)

YEREMENKO, V.V.; DOLGINA, L.V.

New method of determining the sensitivity of clays to drying.
Stek. i ker. 18 no. /:20-29 JI '61. (min 14:7)
(Clay--Testing)

DOLGINA, L. Yu., Cand. Med. Sci., -- (diss) "Condition and development of children who underwent asphyxia at birth," Kharkov, 1961, 15 pp (Kharkov State Medical Institute) 200 copies (KL-Supp 9-61, 190)

DOLGINA, M. I.

DOLGINA, M. I.; OSTROVSKAYA, O.A., d-r biologicheskikh nauk

Effect of drug-induced sleep (barbaryl) on the course of intoxication caused by *B. perfringens* toxin in experimental conditions in animals. Trudy AMN SSSR 24 no.2:116-121 '53. (MLRA 7:7)

(SLEEP. effects,

*on *Clostridium perfringens* toxin intoxication in animals)

(CLOSTRIDIUM PERFRINGENS,

*toxin, eff. of sleep on exper. intoxication)

17(12.14)

SOV/177-58-1-4/25

AUTHOR: Dolgina, M.I.

TITLE: The Application of Soporifics and Narcotics in the Overall Treatment of Persons With Burns (O prime-nenii snotvornykh i narkoticheskikh sredstv v kompleksnom lechenii obozhzhennykh)

PERIODICAL: Voyenno-meditsinskiy zhurnal, 1958, Nr 1, pp 13 - 16 (USSR)

ABSTRACT: The author stresses the importance of soporifics and narcotics in the overall treatment of persons suffering from burn traumas. The induced sleep helps to develop protective inhibitions and is an effective prophylactic and healing method, successfully used in cases of up to 63% burns. In all cases over a 36-60-hour period, plasma loss was either prevented or diminished. Soporifics were given after the burns had been treated with a penicillin solution and Vишневский paste. During a 48-60-hour period, the patients received a small dose of barbamil

Card 1/2

SOV/177-58-1-4/25

The Application of Soporifics and Narcotics in the Overall Treatment of Persons With Burns

(0.1 - 0.3) or nembutal (0.1%) 3-4 times daily. In especially serious cases, a 1%-morphine solution was also injected intravenously once or twice in 24 hours. The patients slept for 16-17 hours a day. During this time, drop transfusion was continued. The author mentions that the good results of the complex burn therapy that included the application of soporifics, have been confirmed by doctors, including Z.Ye. Gorbushina, V.A. Orlik, V.G. Marinesku, B.A. Postnikova, Mezon and Bell and Key. In his investigations, the author used the so-called functional classifications of burn traumas by B.N. Postnikov and G.L. Frenkel'. There are 2 photos and 2 tables.

Card 2/2

VILYAVIN, G.D., prof. (Moskva, D-167, 1-y proyezd aeroporta, d.2/1,
kv. 5); DOLGINA, M.I.

Significance of auto- and homotransplantation of skin in combined
treatment of burns [with summary in English]. Vest.khir. 81 no.10
38-42 0 '58
(MIRA 11:11)

1. Iz Instituta khirurgii imeni A.V. Vishnevskogo (dir. - prof.
A.A. Vishnevskiy) AMN SSSR.

(SKIN TRANSPLANTATION,
in combined burn ther. (Rus))

(BURNS,
skin transpl. in combined ther. (Rus))

DOLGINA, N.I., Cand Med Sci --- (diss) "On
soporifics and narcotics in the system of complex treatment
of burned patients." Mos, 1959, 20 pp (Acad Med Sci USSR)
200 copies (KL, 28-59, 130)

- 107 -

SHEVYER, M.I., doktor med.nauk, polkovnik meditsinskoy sluzhby; DOLGINA, M.I.

Cutaneous autoplasty in thermal burns. Voen.med. zhur. no.5:
50-53 Ny '59. (MIRA 12:8)

(BURNS, surg.

skin autoplasty (Rus))

(SKIN TRANSPLANTATION, in var. dis.
burns, autoplasty (Rus))

SHRAYBER, M.I.; DOLGINA, M.I.

Principles of the treatment of burne patients. Khirurgia 36
no.11:82-86 N '60.
(MIRA 13:12)

1. Iz Instituta khirurgii imeni A.V. Vishnevskogo (dir. - deyst-
vitel'nyy chlen AMN SSSR prof. A.A. Vishnevskiy) AMN SSSR.
(BURNS AND SCALDS)

SHRAYBER, M.I.; DOLGINA, M.I.

Problem of thermal burns; material from the 27th All-Union Congress
of Surgeons. Vest. AMN SSSR 15 no. 10:82-85 '60. (MIRA 14:4)
(BURNS AND SCALDS)

VISHNEVSKIY, A.A.; SHRAYBER, M.I.; DOLGINA, M.I.

Homoplasty of the skin in burns. Vest. AMN SSSR 16 no. 8:8-12 '61.
(MIRA 14:12)

1. Institut khirurgii imeni A.V. Vishnevskogo AMN SSSR.
(SKIN-TRANSPLANTATION) (BURNS AND SCALDS)

VISHNEVSKIY, A.A., general-leytenant meditsinskoy sluzhby, prof.;
SHRAYBER, M.I., polkovnik med.sluzhby, doktor med.nauk; DOLGINA,
M.I., kand.med.nauk

Plastic surgery of the skin in burns. Voen.-med.zhur. no.10:
31-35 0 '61.
(MIRA 15:5)

1. Deystvitel'nyy chlen AMN SSSR (for Vishnevskiy).
(SKIN---TRANSPLANTATION) (BURNS AND SCALDS)

SCHRAYBER, M.I.; SVYATUKHIN, M.V., SHILOV, V.M.; DOLGINA, N.I.

Use of polymer film for local treatment of burns. Eksp. khir.
L'anest. 7 no.4:62-65 Jl-Ag '62. (MIRA 17:5)

1. Iz sibogovogo otdeleniya Instituta Khirurgii im. A.V.Vishnevskogo (dir. - deyatvital'nyy chlen AMN SSSR prof. A.A.Vishnevskiy) AMN SSSR.

VISHNEVSKIY, A.A., prof.; SHRAYBER, M.I., doktor med.nauk; DOLGINA, M.I.,
kand.med.nauk

Errors in the treatment of burn patients. Khirurgiia 38 no.10:
••• 0 '62.
(MIRA 15:12)

1. Iz Instituta khirurgii imeni A.V. Vishnevskogo (dir. - deyst-
vitel'nyy chlen AMN SSSR prof. A.A. Vishnevskiy) AMN SSSR.
(BURNS AND SCALDS)

SAAKYANTS, Ye.M.; DOLGINA, M.I.; MASYUK, A.P.

Novocaine block in homografts of the skin under experimental conditions. Eksper. khir. i anest. no.2:66-68'63. (MIRA 16:7)

1. Iz Instituta khirurgii imeni A.V. Vishnevskogo (dir.-deyst-vitel'nyy chlen AMN SSSR prof. A.A. Vishnevskiy) AMN SSSR.
(SKIN GRAFTING) (NOVOCAINE)

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CIA-RDP86-00513R000410810010-6

DOLGINA, M.S.

AFANAS'Yeva, S.I., insh.; DOLGINA, M.S., insh.; NEKRASH, I.L., insh.

New circuits of automatic warning signalization. Avtom., telem. i
sviaz' 2 no.6:1-7 Je '58.
(MIRA 11:6)
(Railroads--Signaling)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000410810010-6"

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000410810010-6

DOLGINA, R. A.

Dolgina, R. A. "The metabolism of vitamin C in ulcerous gingivostomatitis," Trudy Kazansk. gos. stomatol. in-ta, Issue 2, p.233-249, -Bibliog: 18 items

SO: U-5240, 17 Dec. 53, (Letopis 'Zurnal 'nykh Statey, No. 25, 1949).

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000410810010-6"

17
Dokl. Akad. Nauk

The qualitative reactions of sulfonamides preparations.
N. R. Oryabova and T. I. Dugina. Farmatsiya 10,
No. 3, 19-21(1947); Chem. Zdrav. (Russian Zone Ed.)
1948, L, 927.--On the basis of a crit. comparison of the
various methods for the detection of sulfonamides, only
the optn. reaction with CuSO₄ and heating of the prepa.
are recommended.
M. G. Moore

DOLGINA, T. Z.

Dissertation: "High Quality Metallurgical Dolomite from Poorly Clinkering Raw Materials." Cand Tech Sci, Ural' Polytechnic Inst, Sverdlovsk, 1954. Referativnyy Zhurnal--Khimiya, Moscow, No 14, Jul 54.

SO: SUM No. 356, 25 Jan 1955

DOLGINA, Ye.V.
POPOVA, N.M.; DOLGINA, Ye.V., redaktor; ZUDAKIN, I.M., tekhnicheskiy
redaktor

[Carbide analysis of steel] Karbidnyi analiz stali. Moskva. Gos.
izd-vo obor.promyshl., 1957. 99 p. (MLRA 10:9)
(Steel--Analysis)

U.S.S.R.

✓ Superficial hyperparathyroidism. Z. R. Dolgina and P. M. Kaplin (Okhrab. Inst. Reptil. "Endocrinol.", Med. Stomatol. Inst., Kharkiv). *Arkh. Patol.* 13, No. 5, 24-33 (1951).—Chronic irritation of the parathyroid glands of rabbits, dogs, and rats leads to significant and prolonged hypocalcemia. Following extirpation of 3 parathyroid glands in rabbits (resulting in hypocalcemia) and irritation of the remaining gland prevents hypocalcemia and leads to hypercalcemia. The irritation of the gland was induced by a thread pulled through the gland. J. A. Stukel

BROMBERG, E.D.; DINERSHTEYN, Z.M., professor, direktor; DOLGINA, Z.B.; KAPLAN, P.M.; VLASENKO, P.V., direktor.

Effect of chronic irritation of parathyroid glands on teeth and jaws. Stomatologiya no.4:3-6 Jl-Ag '53.
(MLRA 6:9)

1. Institut eksperimental'noy endokrinologii (for Dinershteyn). 2. Meditsinskiy stomatologicheskiy institut (Khar'kov) (for Vlasenko).
(Parathyroid glands--Diseases) (Teeth) (Jaws)

BABIKOV, M.A., professor; KOMAROV, N.S.; SERGEEV, A.S.; AKOPYAN, A.A.,
retsenzient; DOLGINOV, A.I., retsenzient; BAPTIDANOV, L.N., redakteur.

[Textbook on high voltage technology] Tekhnika vysokikh napri-
shenii. Pod. red. M.A.Babikova. Moskva, Gos. energ. izd-ve, 1947.
312 p.

(MLEA 7:4)

(Electric engineering)

1979. *Insulation characteristics of power transformers*. DUGGINS, A. J. AND CHVARNIKOV, G. G. *Izdat. N. T. P. 21-30* (Aug., 1968) *In Russian*. The measurements were carried through on a 1-ph. model transformer. They included the determination of the temperature dependence of the dielectric loss, the insulation resistance, the capacitance, and leakage currents. The temperature curves of tan δ and of the leakage currents were found to be linear when plotted on a semi-logarithmic scale. The slope of the former decreases with increasing moderate content of the windings. The relation between the dielectric losses of the transformer oil and of the transformer as a whole, as well as the slope of the temperature curve, is a criterion of the insulator quality.

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CIA-RDP86-00513R000410810010-6"

DOIGUNOV, A. T.

29657

Volnovyye kharakteristiki Liniy pri vysokikh
Napryazheniyakh. Elvetskoye vyd., 1949, No2, .
s. 39-44.-Bibliogr: 6Naov.
SOK LETOPIS' NO 40

DOLGINOV, A. I.

USSR/Electricity - Transmission Lines
Conductors

JUL 50

PL 162120
"Discharge From the Cable to the Conductor in the
Span of a Power Transmission Line," A. I. Dolginov,
Span of a Power Transmission Line, A. I. Dolginov, Engr
Grad Tech Sci, V. V. Kolganov, Engr

"Elek Svants" No 7, pp 36-37

In the stormy season of 1949 an instantaneous dis-
charge between cable and conductor occurred in center
of span of 110-kv power transmission line. Describes
and mathematically explains the accident. Points
out that danger of discharge increases considerably

162726

JUL 50

USSR/Electricity - Transmission Lines
(Contd)

If distance between cable and conductor is re-
duced, and recommends this distance be specially
checked where possible.

162725

59

B 64

621.316.1 : 621.316.9
1934. Induction from an overhead earth wire to a conductor at the middle of a transmission line span.
A. I. DANILOV AND V. V. KOLMANOV. Elektrichesvo,
No. 17, 1934 (Nov., 1934) in Russian.

This shows a Major in Elekt. Br., No. 7, 1950, referring to an overheat earth wire to the highest conductor of a 24 KV line erected on steel towers. A detailed investigation disclosed only

displacement of the earth wire and the top conductor, and it is important that the breaking of the wire due to severe overstepping of its strands. This is a very low failure and in general there is no need to increase the clearance between the earth wire and top conductor or above 4 m in spans of ~ 200 m.

4. LAMINARISATION

XLGINCV, A. I.

USSR/Electricity - Transmission Lines

Lightning Protection

Dec 5

178722
"Atmospheric Overvoltages on Power Transmission
Lines and Calculation of the Lightning Protection
of Lines With Overhead Ground Wires," Docent
A. I. Dolginov, Cand Tech Sci, All-Union Corr
Eng Inst.

"Elektrichesstvo," No 12, pp 6-15

Discusses mechanism of electromagnetic excitation of
lightning discharge on power lines and method for
calculation or protective level of transmission lines

178722
USSR/Electricity - Transmission Lines
(Contd)

Dec 50

using overhead ground wires. Also considers
characteristics of wave processes on high-voltage
lines. Submitted 27 Jul 50.

~MULNUV, A. I.

USSR/Electricity - Transmission Lightning Protection Apr 5

"Grounding the Ground Wires of Overhead Lines Through Spark Gaps," Docent A. I. Dolginov, Cand Tech Sci, I. G. Smirnov, Engr, V. D. Yurenkov, Cand Tech Sci, Moscow

228T46

PA Article states Soviets want to use capacitive coupling from the ground wires of overhead high-voltage lines to supply small consumers, for relay protection, communications, etc. However, according to

article, they did not know whether these wires would afford the same lightning protection as Lab or the High-Voltage Network of the Cen

Sci USSR, show that they do, article says: The use of overhead wires in this way has now been approved by the Tech Amni, Min of Elec Power Stations USSR.

228T46

228T46

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000410810010-6

DOLGINOV, A.I.

DOLGINOV, A.I.; SAPAROVA, A.L., redaktor; SKVORTSOV, I.M., tekhnicheskiy re-
daktor.

[Lighting arresters] Gрозозащита elektricheskikh ustanovok.
Moskva, Gos. energ. izd-vo, 1954, 239 p.
(Lighting arresters) (MIRA 7:7)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000410810010-6"

DOLGINO, A. I.

USSR Electronics - Wave processes in power lines

FD-1016

Card 1/1 : Pub. 153 - 20/24

Author : Dolgino, A. I.

Title : Wave processes in lines in the presence of an impulse corona

Periodical : Zhur. tekhn. fiz., 24, 1111-1124, Jun 1954

Abstract : Discusses the characteristics of lines in presence of impulse corona. Sets up wave equation for a line with impulse corona and the equation for the electromagnetic field around a corona line and solves. Finds the voltages induced in parallel lines. Thanks Prof. G. A. Grinberg. Four references, 3 USSR (e.g. V. V. Gey and S. L. Zayyents; A. K. Potuzhnyy and S. M. Furtik).

Institution : -

Submitted : October 20, 1953

P-271

BABIKOV, Maksim Aleseyevich, professor, redaktor; KOMAROV, Nikita Semenovich; SERGEEV, Aleksandr Sergeyevich; DOLGINOV, A.I., redaktor; VORONIN, K.P., tekhnicheskiy redaktor.

[High tension engineering] Tekhnika vysokikh napriashenii
Pod red. M.A.Batikova, Izd. 2-e, perer. Moskva, Gos. energet.
izd-vo 1955, 287 p. (MILRA 8:12)
(Electric power distribution--High tension)

U S S R

621.317.313 : 621.317.713

2166. Testing of insulation for partial discharge
With the co-authors A. I. Dzhidzhev, G. G. Ruzakov and
M. V. Krasovetskov. Elektrosvyaz, 1988, No. 1, 33-5,
61 Russian.

(For laboratory testing the test sample is connected
in series with an inductor across the secondary of a
step-up transformer, the core being connected across
the inductance. For field testing where the test object
is permanently earthed, a separate series combination
of capacitor and inductor is connected across
the test object. The scheme was applied to main-
tenance testing of instrument transformers and bushing
insulators up to 320 kV. The types of faults discovered
in the bushings are listed. E. M. Tikhonov)

PHASE I BOOK EXPLOITATION

730

Dolginov, Aleksandr Iosifovich

Rezonans v elektricheskikh tselyakh i sistemakh (Resonance in
Electric Circuits and Systems) Moscow, Gosenergoizdat,
1957. 327 p. 7,000 copies printed.

Ed.: Kantor, R.M.; Tech. Ed.: Voronin, K.P.

PURPOSE: The monograph is intended for research institute personnel
and design engineers.

COVERAGE: The theory of resonance in electric circuits and systems
is discussed. Theoretical and experimental results obtained from
the study of operating conditions at resonance are generalized,
and an analysis of various forms of resonance observed in electric
circuits and systems is presented. Problems connected with
parametric resonance of various forms are also covered.

Card 1/12